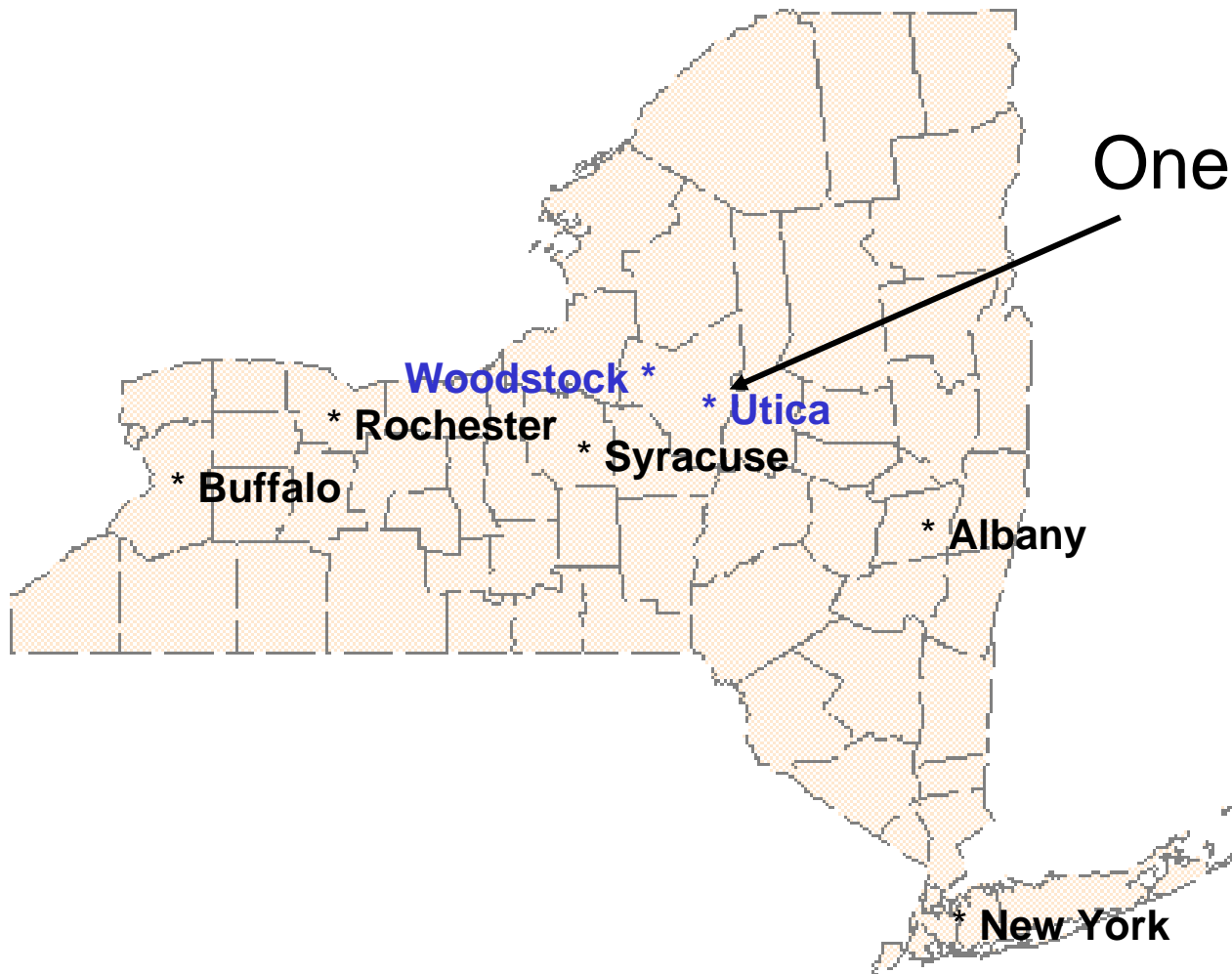


A grayscale photograph of three young women with long hair, smiling and posing closely together. The woman on the left is resting her chin on her hand, and the woman on the right is also resting her chin on her hand. The image is faded to serve as a background for the text.

# Learning through Giving

A “Gifts from the Kitchen” Nutrition  
Series



Oneida County

Woodstock \*

\* Rochester

\* Syracuse

\* Buffalo

\* Utica

\* Albany

\* New York

# Gifts From the Kitchen

- Calcium
- Iron
- Vitamin A
- Vitamin B6
- Zinc



# Calcium

Calcium

You can eat smart and stretch your dollars!

## What is Calcium?

Calcium is a mineral found in foods such as milk. Our bodies need Calcium to function properly. Most of the Calcium we eat is used to make bones and teeth. Also, we need Calcium for our muscles and nerves to work properly and our blood to clot.

## Where can you get Calcium?

Dairy foods, like milk, yogurt and cheese, are good sources of Calcium. But, you may not realize that there are other ways to get Calcium. Waffles or pancakes, spinach, greens and broccoli are all Calcium sources. And, new products are available that add Calcium, called calcium-fortified, such as orange juice, bread and cereals. Check the label to see if a product has Calcium.

**Everyone  
needs  
Calcium!**



## How much do you need?

The amount of calcium you need depends on your age and health. Here are some general guidelines for determining how much calcium you need. These amounts will change if you are pregnant or have certain medical conditions. Youth need more calcium because they are still growing and they need Calcium to build new bone.

Birth – 6 months	210 mg
6 months – 1 year	270 mg
1 – 3 years	500 mg
4 – 8 years	800 mg
9 – 18 years	1,300 mg
19 – 50 years	1,000 mg
51 – 70 years	1,200 mg
71 and older	1,200 mg

# Calcium

## Get More Calcium!

Eat more Calcium-rich foods.

Make dips, salad dressings or smoothies using low-fat yogurt.

Try low-fat or fat-free evaporated milk in your coffee (but watch the caffeine!) or in recipes that use milk, such as gravies, soups or casseroles.

Add Non-fat dry milk to puddings, homemade cookies, breads or muffins, soups, or even a glass of milk.

**You can add:**

- 3 Tablespoons to each cup of milk in puddings or cocoa
- 4 Tablespoons to each cup of hot cereal before cooking
- 2 Tablespoons sifted into each cup of flour in cakes, cookies or breads.

**Try this  
thrifty  
treat!**

## A Cup of Warmth!

Here's a gift from the kitchen that is high in Calcium.



### Instructions for Making Mix:

- 2 ½ cups powdered milk
- 1 cup powdered sugar
- ½ cup baking cocoa

Combine all ingredients. Mix well. Store in an airtight container. This mix can be stored at room temperature for 1 year. Makes 16 servings.

### Instructions for Making 1 Serving:

To make 1 cup of hot chocolate, mix ¼ cup hot chocolate mix with 6-8 ounces of hot water.

Nutrition Facts for 1 serving: 103 Calories, 0.5 g total fat, 3.7 mg cholesterol, 101 mg sodium, 412 ug Vitamin A, 239 mg Calcium, 0.44 mg Iron, 0.07 mg B6, 0 mg Zinc.



# Iron

Iron

You can eat smart and stretch your dollars!

## What is Iron?

Iron is a mineral that is part of the red blood cells in your blood. As part of the red blood cells, iron carries oxygen to all of the cells in your body, so your cells have energy to work.

## Where can you get Iron?



There are 2 forms of iron found in foods: heme and non-heme. Heme iron is more easily absorbed by our bodies. Good sources of heme iron include: beef, tuna, chicken, and turkey. Non-heme iron is not absorbed by our body as easily, but still provides some of this important mineral. Good sources of non-heme iron are: beans, raisins, other dried fruits, and dark-green leafy vegetables. Iron-fortified foods are foods that have non-heme iron added to them. Good sources of iron-fortified foods include: cereals, grits, oatmeal, whole wheat bread, flours, rice and cream of wheat (farina).

Source: U.S. Department of Agriculture, Agricultural Research Service, 2004. USDA Nutrient Database for Standard Reference, Release 16-1. Nutrient Data Laboratory Home Page, <http://www.nal.usda.gov/fnic/foodcomp>

## How much do you need?

Everyone needs iron each day, but some people need more iron than others.

Age	Males	Females	Pregnancy
7-12 months	11 mg	11 mg	
1-3 years	7 mg	7 mg	
4-8 years	10 mg	10 mg	
9-13 years	8 mg	8 mg	
14-18 years	11 mg	15 mg	27 mg
19-50 years	8 mg	18 mg	27 mg
51+ years	8 mg	8 mg	

Source: Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc (2001). <http://www.icm.edu/project.asp?id=4574>

Everyone  
needs  
iron!

# Iron

## Get More Iron!



Eat more iron-rich foods.

Add beans to your favorite casseroles, rice or soups.

Be sure to drink tea and coffee *between* meals.

Compare labels! Even though 2 cereals look the same, their iron content may be different. The amount of iron listed on the label will tell you which products have iron.

## Peanut Butter Crunch Snack

Here's a gift from the kitchen that is high in Iron.

### Ingredients:

⅔ cup light brown sugar  
 ⅓ cup chunk style peanut butter  
 ¼ cup butter  
 1 egg  
 ½ cup Cream of Wheat (2 ½ minute variety)  
 1 teaspoon vanilla extract  
 1 ¼ cup flour  
 ½ teaspoon baking soda  
 ¼ salt

### Directions:

Beat together brown sugar, peanut butter, butter, and egg until fluffy. Add Cream of Wheat cereal and vanilla. Stir in flour, baking soda, and salt to make stiff dough. Roll into 1-inch balls; place on greased cookie sheet 2 inches apart. With fork, flatten in a crisscross pattern. Bake in a 350 F oven for 8 to 10 minutes or until lightly browned. Let stand on cookie sheet about 1 minute or until firm enough to remove to cool. After cookies are completely cooled, place cookies in decorative tin or jar with the recipe attached. Makes 18 cookies.

Nutrition Facts Per Cookie: 136 Calories, 5.4 g Fat, 19mg Cholesterol, 95 mg Sodium, 115 IU Vitamin A, 19 mg Calcium, 2.1 mg Iron, 0.04 mg B6, 0.3 mg Zinc.

Try this  
thrifty  
treat!



# Vitamin A

Vitamin A

You can eat smart and stretch your dollars!

Everyone  
needs  
Vitamin A!

## What is Vitamin A?

Vitamin A is an essential compound that our bodies need in order to work right and stay healthy. Vitamin A helps keep skin and hair healthy, helps us see at night, and helps with bone formation and tooth development.

## Where can you get Vitamin A?

**Plant Sources:** Most dark green or orange-colored fruits and vegetables are high in Vitamin A. Examples:



**Fruit:** peaches, nectarines, apricots, papaya, mango, and cantaloupe.

**Vegetables:** carrots, pumpkin, spinach, kale, tomatoes, asparagus, sweet potatoes, collard greens, Brussels sprouts, peppers (green or red), broccoli, and winter squash.

**Grains:** Fortified bread and cereal products are another source of vitamin A.

**Animal Sources:** Good animal sources are fortified milk, liver, and eggs. Because liver and eggs are high in cholesterol, you should choose these sparingly.

Source: Vitamin A: How to get it!, Published by Cornell Cooperative Extension, A. Stupp, 1992

## How much do you need?

Everyone needs Vitamin A. How much Vitamin A you need depends on your age and if you are male or female.

Age	Children	Men	Women	Pregnancy
1-3 years	300 ug			
4-8 years	400 ug			
9-13 years		600 ug	600 ug	
14-18 years		900 ug	700 ug	750 ug
19-50		900 ug	700 ug	770 ug
50 +		900 ug	700 ug	

Source: Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc (2001). <http://www.nap.edu/books/0309072794/html/>

# Vitamin A

## Get More Vitamin A!

Read the label! By looking at the label, you can see how much Vitamin A foods have.

Eat a variety of fruits & vegetables. Try to eat 5-9 servings each day.

### What's a serving?

#### Vegetables:

1 cup raw, leafy greens  
½ cup other types of raw vegetables  
½ cup cooked vegetables

#### Fruits:

1 medium fruit  
½ cup diced fruit  
¼ cup fruit juice



## Pumpkin Raisin Bread

Here's a gift from the kitchen that is high in Vitamin A.

### Instructions for Making Mix:

#### Ingredients:

1½ cups of flour  
2½ teaspoons pumpkin pie spice  
¾ teaspoon of baking soda  
1½ cups sugar  
½ cup raisins

#### Directions:

Combine all of the above ingredients, except the pumpkin, in a large bowl; pour into a 1-quart re-sealable plastic bag or a 1-quart canning jar.

### Instructions to Attach to the Mix:

Preheat oven to 350° F. Beat together ¼ cup of canned pumpkin, ½ cup unsweetened applesauce, 2 large eggs, and ¼ cup of orange juice or water in a large mixing bowl until well blended. Stir in contents of the bag until they are just moistened. Spoon batter into greased and floured 9x5-inch loaf pan. Bake for 60-65 minutes or until a wooden toothpick inserted in center comes out clean. Let the bread cool in the pan for 10 minutes; put on a rack to cool completely. Makes 12 servings.

Nutrition Facts for 1 serving: 209 Calories, 1.2 g fat, 37 mg cholesterol, 190 mg sodium, 2.07 g fiber, 9075IU Vitamin A, 24 mg Calcium, 1.7 mg Iron, 0.07 mg B6, 0.31 mg Zinc

Try this  
thrifty  
treat!



# Being Thrifty



**Thrifty is Nifty**

You can eat smart and stretch your dollars!

## Thrifty is Nifty

### Ways to save at the Grocery Store

#### Never shop when you're hungry

Never shop when you're hungry. If you find yourself in a store with an empty stomach, buy yourself a snack- it will save you dollars in the long run!

#### Plan ahead

- Clean out your refrigerator before you do your shopping- it will be much easier to put things away when you get home.
- Shop with a list and plan your meals around what you already have in your cupboard.
- Don't forget to check out what's on sale that week. When planning meals, plan to use things that are on sale.

#### Watch where you shop

- Try to do the majority of your shopping along the outside walls of your grocery store (fruits and veggies, breads, meats, dairy)
- Outsmart the manufacturers- pay attention to where foods are placed on the shelves- companies pay top dollar to have their brand placed at eye level on the middle shelf. Remember to check out the top and bottom shelves too- you're sure to find some bargains!

#### Buy produce in season

When vegetables and fruits are in season, they are cheaper to buy. You can buy produce in season and prepare it, freeze it or store it properly to keep it for later.

**We all have to spend money, but we don't all have to waste it.**



## Watch for advertising gimmicks

- Just because it says it, doesn't mean you have to do it! Most of the time, if the sign says 4 for \$2.00 you don't have to buy 4. You can buy only 1 at \$0.50.
- Use your coupons wisely- they may tempt you to buy foods you may not like or need- but they are a great way to save if you can use the item.
- Check the item's unit price. It tells you exactly how much each item costs per ounce or pint etc. You can even compare the price on one sheet of toilet paper! The unit price sticker is located on the shelf under the item (to the left of the item's price ticket). One pitfall to avoid with unit pricing- even though it is usually true that bigger containers cost less per ounce than smaller ones- you may never be able to use all of the food in the large box and then it will go to waste.
- Be aware of the advertising costs built into the more famous, nationally advertised brands- commercials and ads are very expensive!



## Try this thrifty treat!

### Pretzel Wands

10 oz. vanilla candy coating (wafers)  
9 oz. package large stick pretzels  
Multi-colored sprinkles

Melt candy coating in a microwave-safe, 2-cup measuring cup on high power (100%) 1 to 2 minutes, stirring every 30 seconds, until smooth. Dip each pretzel into candy coating to cover half the pretzel. Sprinkle with sprinkles! Stand each pretzel, coated side up, in a mug or glass until coating hardens. Makes about 2 dozen.

Nutrition Facts for 1 serving: 172 Calories, 4.5 g Fat (2.3 g Saturated Fat), 0 mg Cholesterol, 488 mg Sodium, 25 IU Vitamin A, 14 mg Calcium, 1.6 mg Iron, 0.04 mg B6, 0.4 mg Zinc



# How thrifty are they?

## **Hot Cocoa:**

\$0.15 / packet

## **Peanut Butter Crunch Cookies:**

\$0.50 / 18 cookies

## **Bean Soup Mix:**

\$0.50/ Mix (Makes 2 quarts)

## **Pumpkin Raisin Bread:**

\$0.50/ Mix + Pumpkin + Baking Tin

## **Pretzel Wands:**

\$0.25 each



# Did it work?

## Calcium:

- \* **80% increase**
- \* Skim Milk
- \* Tried fortified juice
- \* Believe that Calcium matters

# Did it work? (cont'd)

## **Iron:**

\* 22% Increase

## **Vitamin A:**

\* 52% Increase

## **Vitamin B6:**

\* 27% Increase

# Other Outcomes

## **Fiber**

\* 90% Increase

## **Vegetables**

\* Before: Average Serving/ day = 0.9

\* After: Average Serving/ day = 3

A grayscale photograph of a young woman with dark hair, smiling broadly while lying on her stomach on a grassy field. She is propped up on her left arm, resting her head on her hand, and is reading an open book. The background is a soft-focus landscape.

For more information:

**[www.cce.cornell.edu/oneida/cce/oneida.htm](http://www.cce.cornell.edu/oneida/cce/oneida.htm)**